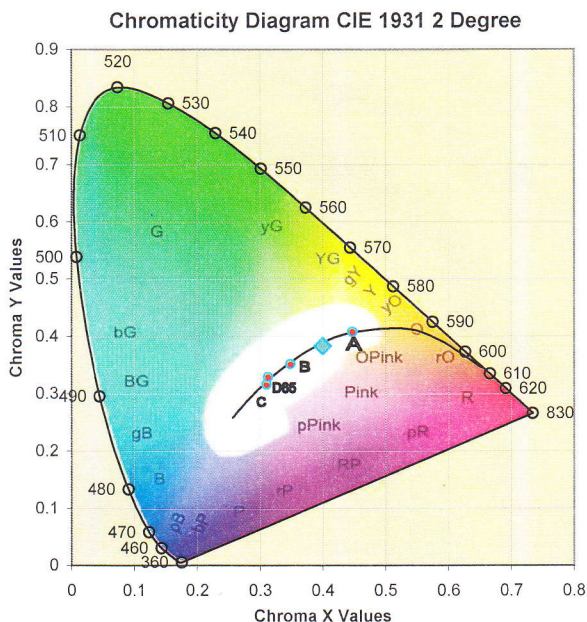


BALLABS CERTIFIED TEST REPORT NO.: 20935.0 A DATE 08/16/19
PREPARED FOR: H.E. WILLIAMS, INC - CARTHAGE, MO
DESCRIPTION: 2-28LED 22"ARRAY 1X4'RETROFIT KIT w/WHITE REFL & RIBBED
FROST CENTER LENS-LITHONIA GT8232A12MVOLT TEST HOUSING
ADVANCE #XI020C056V054BST2 @ 380mA
CATALOG NBR: PTR-14-L27/835-RA- (L23) -DIM-PH-UNV
LAMP TYPE : 10560202 HLM2228_5630 REV B

INPUT VOLTAGE (V)	119.99
INPUT CURRENT (A)	0.1565
INPUT WATTS (W)	18.5200
POWER FACTOR	0.9863
THD _v (%)	0.158
THD _i (%)	8.894
LUMINOUS EFFICACY-LPW	131.0
LUMINOUS FLUX- LUMENS	2427
CHROMA x	0.4000
CHROMA y	0.3830
CHROMA u	0.2355
CHROMA v	0.5072
DELTA uv (Duv)	-0.0023
CORR COLOR TEMP (K)	3556
COLOR REND INDEX (RA)	84.61
COLOR REND INDEX (R9)	12.4

Wavelength (nm)	Spectral Flux mW/nm	Wavelength (nm)	Spectral Flux mW/nm
350	0.2258	610	44.2674
360	0.2815	620	40.7524
370	0.2397	630	35.8245
380	0.2887	640	29.9427
390	0.3229	650	24.1375
400	0.3591	660	18.8929
410	0.6488	670	14.3359
420	1.8401	680	10.7266
430	5.7799	690	7.9111
440	16.3097	700	5.7728
450	40.8298	710	4.2079
460	23.9657	720	3.0432
470	16.0894	730	2.1891
480	12.5228	740	1.5969
490	15.3930	750	1.1476
500	20.2854	760	0.8488
510	23.8060	770	0.6288
520	25.7394	780	0.4495
530	27.1465	790	0.3355
540	28.9788	800	0.2546
550	31.3840	810	0.1933
560	34.5057	820	0.1589
570	38.0147	830	0.1221
580	41.7178	840	0.0920
590	44.6069	850	0.0752
600	45.5872		

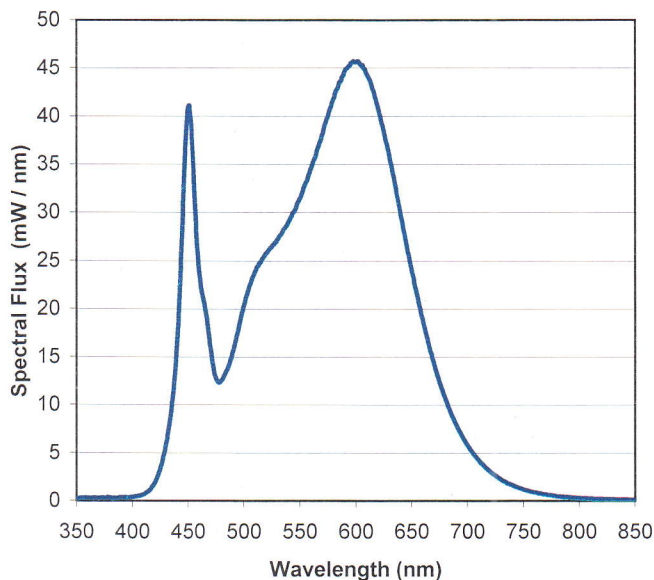


Data collected per LM79-08 using a Labsphere integrating sphere and 2100 spectroradiometer. Calibration of the spectroradiometer-sphere is traceable to the National Institute of Standards and Technology.



NVLAP LAB CODE 200921-0

[Signature]
Kelly C Lerbs
Vice President



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SIGNIFICANCE OF THE TEST IS LIMITED TO THE DEGREE THAT THE TESTED SAMPLE IS REPRESENTATIVE. OTHER FACTORS AFFECT FIELD PERFORMANCE.